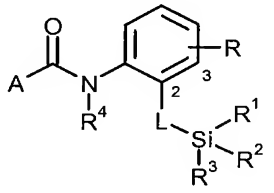
Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently amended) Silylated carboxamides of the formula (I)



(I)

in which

R is hydrogen, fluorine, chlorine, methyl, isopropyl, methylthio or trifluoromethyl,

L is a direct bond or is in each case optionally substituted straight-chain or branched alkylene (alkanediyl), alkenylene (alkenediyl) or alkynylene (alkyndiyl),

R^1 and R^2 independently of one another are hydrogen, C_1-C_8-alkyl, C_1-C_8-alkoxy, C_1-C_4-alkoxy-C_1-C_4-alkyl, C_1-C_4-alkylthio-C_1-C_4-alkyl or C_1-C_6-haloalkyl,

R^3 is hydrogen, C_1-C_8-alkyl, C_1-C_8-alkoxy, C_1-C_4-alkoxy-C_1-C_4-alkyl, C_1-C_4-alkylthio-C_1-C_4-alkyl, C_2-C_8-alkenyl, C_2-C_8-alkynyl, C_1-C_6-haloalkyl, C_2-C_6-haloalkenyl, C_2-C_6-haloalkynyl, C_3-C_6-cycloalkyl, or is in each case optionally substituted phenyl or phenylalkyl,

R^4 is hydrogen, C_1-C_8-alkyl, C_1-C_6-alkylsulphinyl, C_1-C_6-alkylsulphonyl, C_1-C_4-alkoxy-C_1-C_4-alkyl, C_3-C_8-cycloalkyl; C_1-C_6-haloalkyl, C_1-C_4-haloalkylthio, C_1-C_4-haloalkylsulphinyl, C_1-C_4-haloalkylsulphonyl, halo-C_1-C_4-alkoxy-C_1-C_4-alkyl, C_3-C_8-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms; formyl, formyl-C_1-C_3-alkyl, (C_1-C_3-alkyl)carbonyl-C_1-C_3-alkyl, (C_1-C_3-alkoxy)carbonyl-C_1-C_3-alkyl; halo-(C_1-C_3-alkyl)carbonyl-C_1-C_3-alkyl, halo-(C_1-C_3-alkoxy)carbonyl-C_1-C_3-alkyl having in each case 1 to 13 fluorine, chlorine and/or bromine atoms; (C_1-C_8-alkyl)carbonyl, (C_1-C_8-alkoxy)carbonyl, (C_1-C_4-alkoxy-C_1-C_4-alkyl)carbonyl, (C_3-C_8-cycloalkyl)carbonyl; (C_1-C_6-haloalkyl)carbonyl,

(C_1-C_6-haloalkoxy)carbonyl, (halo-C_1-C_4-alkoxy-C_1-C_4-alkyl)carbonyl, (C_3-C_8-halocycloalkyl)carbonyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms; or $-C(=O)C(=O)R^5$, $-CONR^6R^7$ or $-CH_2NR^8R^9$,

R^5 is hydrogen, C_1-C_8-alkyl, C_1-C_8-alkoxy, C_1-C_4-alkoxy-C_1-C_4-alkyl, C_3-C_8-cycloalkyl; C_1-C_6-haloalkyl, C_1-C_6-haloalkoxy, halo-C_1-C_4-alkoxy-C_1-C_4-alkyl, C_3-C_8-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms,

R^6 and R^7 independently of one another each are hydrogen, C_1-C_8-alkyl, C_1-C_4-alkoxy-C_1-C_4-alkyl, C_3-C_8-cycloalkyl; C_1-C_8-haloalkyl, halo-C_1-C_4-alkoxy-C_1-C_4-alkyl, C_3-C_8-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms,

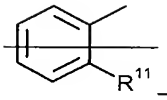
R^6 and R^7 furthermore together with the nitrogen atom to which they are attached form a saturated heterocycle having 5 to 8 ring atoms which is optionally mono- or polysubstituted by identical or different substituents from the group consisting of halogen and C_1-C_4-alkyl, where the heterocycle may contain 1 or 2 further nonadjacent heteroatoms from the group consisting of oxygen, sulphur and NR^{10},

R^8 and R^9 independently of one another, are hydrogen, C_1-C_8-alkyl, C_3-C_8-cycloalkyl; C_1-C_8-haloalkyl, C_3-C_8-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms,

R^8 and R^9 furthermore together with the nitrogen atom to which they are attached form a saturated heterocycle having 5 to 8 ring atoms which is optionally mono- or polysubstituted by identical or different substituents from the group consisting of halogen and C_1-C_4-alkyl, where the heterocycle may contain 1 or 2 further nonadjacent heteroatoms from the group consisting of oxygen, sulphur and NR^{10},

R^{10} is hydrogen or C_1-C_6-alkyl,

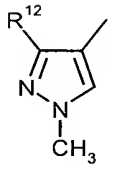
~~A is the radical of the formula (A1)~~

~~  ~~ ~~(A1) in which~~

~~R^{11} is hydrogen, halogen, hydroxyl, cyano, C_1-C_6-alkyl, C_1-C_4-haloalkyl, C_1-C_4-haloalkoxy or C_1-C_4-haloalkylthio having in each case 1 to 5 halogen atoms,~~

~~or~~

A is the radical of the formula (A2)



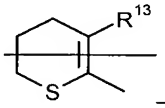
(A2)

in which

R^{12} is chlorine or iodine[[,]]

~~or~~

~~A is the radical of the formula (A3)~~

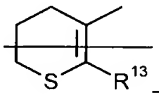


~~(A3) in which~~

~~R^{13} is C_1-C_4-alkyl or C_1-C_4-haloalkyl having 1 to 5 halogen atoms,~~

~~or~~

~~A is the radical of the formula (A4)~~

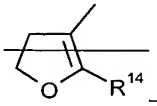


~~(A4) in which~~

~~R^{13} is C_1-C_4-alkyl or C_1-C_4-haloalkyl having 1 to 5 halogen atoms,~~

~~or~~

~~A is the radical of the formula (A5)~~

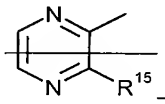


~~(A5) in which~~

~~R^{14} is C_1-C_4-alkyl or C_1-C_4-haloalkyl having 1 to 5 halogen atoms,~~

~~or~~

~~A is the radical of the formula (A6)~~

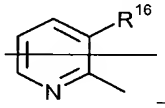


~~(A6) in which~~

~~R^{15} is hydrogen, halogen, C_1-C_4-alkyl or C_1-C_4-haloalkyl having 1 to 5 halogen atoms,~~

~~or~~

~~A is the radical of the formula (A7)~~

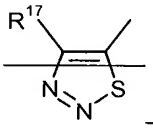


~~(A7) in which~~

~~R^{16} is halogen, hydroxyl, C_1-C_4-alkyl, C_1-C_4-alkoxy, C_1-C_4-alkylthio, C_1-C_4-haloalkyl, C_1-C_4-haloalkylthio or C_1-C_4-haloalkoxy having in each case 1 to 5 halogen atoms,~~

~~or~~

~~A is the radical of the formula (A8)~~

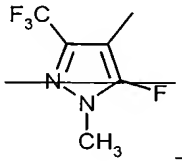


~~(A8) in which~~

~~R^{17} is C_1-C_4-alkyl,~~

~~or~~

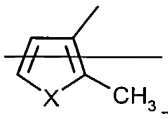
~~A is the radical of the formula (A9)~~



~~(A9),~~

~~or~~

~~A is the radical of the formula (A10)~~

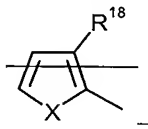


~~(A10) in which~~

~~X is O (oxygen) or S (sulphur),~~

~~or~~

~~A is the radical of the formula (A11)~~



~~(A11) in which~~

~~X is O (oxygen) or S (sulphur),~~

~~R^{18} is iodine or methyl~~.

2. (Currently amended) A silylated caboxamide of the formula (I) of Claim 1, wherein

R is hydrogen, fluorine, chlorine, methyl or trifluoromethyl,

L is a direct bond or is in each case optionally halogen-substituted straight-chain or branched C_1-C_6-alkylene, C_2-C_6-alkenylene or C_2-C_6-alkynylene,

R^1 and R^2 independently of one another are C_1-C_6-alkyl, C_1-C_6-alkoxy, C_1-C_3-alkoxy-C_1-C_3-alkyl or C_1-C_3-alkylthio-C_1-C_3-alkyl,

R^3 is C_1-C_6-alkyl, C_1-C_6-alkoxy, C_1-C_3-alkoxy-C_1-C_3-alkyl, C_1-C_3-alkylthio-C_1-C_3-alkyl, C_3-C_6-cycloalkyl, phenyl or benzyl,

R^4 is hydrogen, C_1-C_6-alkyl, C_1-C_4-alkylsulphinyl, C_1-C_4-alkylsulphonyl, C_1-C_3-alkoxy-C_1-C_3-alkyl, C_3-C_6-cycloalkyl; C_1-C_4-haloalkyl, C_1-C_4-haloalkylthio, C_1-C_4-haloalkylsulphinyl, C_1-C_4-haloalkylsulphonyl, halo-C_1-C_3-alkoxy-C_1-C_3-alkyl, C_3-C_8-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms; formyl, formyl-C_1-C_3-alkyl, (C_1-C_3-alkyl)carbonyl-C_1-C_3-alkyl, (C_1-C_3-alkoxy)carbonyl-C_1-C_3-alkyl; halo-(C_1-C_3-alkyl)carbonyl-C_1-C_3-alkyl, halo-(C_1-C_3-alkoxy)carbonyl-C_1-C_3-alkyl having in each case 1 to 13 fluorine, chlorine and/or bromine atoms; (C_1-C_6-alkyl)carbonyl, (C_1-C_4-alkoxy)carbonyl, (C_1-C_3-alkoxy-C_1-C_3-alkyl)carbonyl, (C_3-C_6-cycloalkyl)carbonyl; (C_1-C_4-haloalkyl)carbonyl, (C_1-C_4-haloalkoxy)carbonyl, (halo-C_1-C_3-alkoxy-C_1-C_3-alkyl)carbonyl, (C_3-C_6-halocycloalkyl)carbonyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms, or -C(=O)C(=O)R^5, -CONR^{6}R^7 or -CH$_2$NR^{8}R^9,

R^5 is hydrogen, C_1-C_6-alkyl, C_1-C_4-alkoxy, C_1-C_3-alkoxy-C_1-C_3-alkyl, C_3-C_6-cycloalkyl; C_1-C_4-haloalkyl, C_1-C_4-haloalkoxy, halo-C_1-C_3-alkoxy-C_1-C_3-alkyl, C_3-C_6-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms,

R^6 and R^7 independently of one another each are hydrogen, C_1-C_6-alkyl, C_1-C_3-alkoxy-C_1-C_3-alkyl, C_3-C_6-cycloalkyl; C_1-C_4-haloalkyl, halo-C_1-C_3-alkoxy-C_1-C_3-alkyl, C_3-C_6-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms,

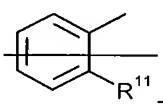
R^6 and R^7 furthermore together with the nitrogen atom to which they are attached form a saturated heterocycle having 5 or 6 ring atoms which is optionally mono- to tetrasubstituted by identical or different substituents from the group consisting of halogen and C_1-C_4-alkyl, where the heterocycle may contain 1 or 2 further non-adjacent heteroatoms from the group consisting of oxygen, sulphur and NR^{10},

R^8 and R^9 independently of one another are hydrogen, C_1-C_6-alkyl, C_3-C_6-cycloalkyl; C_1-C_4-haloalkyl, C_3-C_6-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms,

R^8 and R^9 furthermore together with the nitrogen atom to which they are attached form a saturated heterocycle having 5 or 6 ring atoms which is optionally mono- or polysubstituted by identical or different substituents from the group consisting of halogen and C_1-C_4-alkyl, where the heterocycle may contain 1 or 2 further non-adjacent heteroatoms from the group consisting of oxygen, sulphur and NR^{10},

R^{10} is hydrogen or C_1-C_4-alkyl,

~~A is the radical of the formula (A1)~~



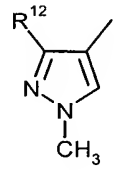
~~(A1) in which~~

~~R^{11} is hydrogen, fluorine, chlorine, bromine, iodine, hydroxyl, cyano, C_1-C_4-alkyl, C_1-C_2-haloalkyl, C_1-C_2-haloalkoxy or C_1-C_2-~~

~~haloalkylthio having in each case 1 to 5 fluorine, chlorine and/or bromine atoms,~~

~~or~~

A is the radical of the formula (A2)



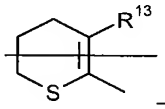
(A2)

in which

R^{12} is chlorine[[,]] or iodine[[,]]

~~or~~

~~A is the radical of the formula (A3)~~

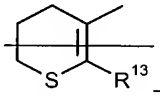


~~(A3) in which~~

~~R^{13} is methyl, ethyl or C_1-C_2-haloalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms,~~

~~or~~

~~A is the radical of the formula (A4)~~

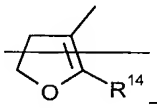


~~(A4) in which~~

~~R^{13} is methyl, ethyl or C_1-C_2-haloalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms,~~

~~or~~

~~A is the radical of the formula (A5)~~

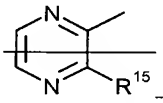


~~(A5) in which~~

~~R^{14} is methyl, ethyl or C_1-C_2-haloalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms,~~

~~or~~

~~A is the radical of the formula (A6)~~

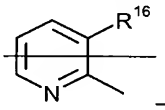


~~(A6) in which~~

~~R^{15} is hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C_1-C_2-haloalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms,~~

~~or~~

~~A is the radical of the formula (A7)~~

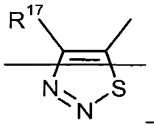


~~(A7) in which~~

~~R^{16} is fluorine, chlorine, bromine, iodine, hydroxyl, C_1-C_4-alkyl, methoxy, ethoxy, methylthio, ethylthio, difluoromethylthio, trifluoromethylthio, C_1-C_2-haloalkyl or C_1-C_2-haloalkoxy having in each case 1 to 5 fluorine, chlorine and/or bromine atoms,~~

~~or~~

~~A is the radical of the formula (A8)~~

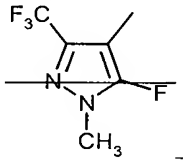


~~(A8) in which~~

~~R^{17} is methyl, ethyl, n-propyl or isopropyl,~~

~~or~~

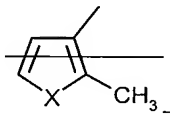
~~A is the radical of the formula (A9)~~



~~(A9),~~

~~or~~

~~A is the radical of the formula (A10)~~

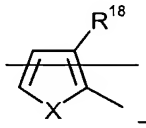


~~(A10) in which~~

~~X is O (oxygen) or S (sulphur),~~

~~or~~

~~A is the radical of the formula (A11)~~



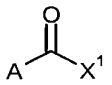
~~(A11) in which~~

~~X is O (oxygen) or S (sulphur),~~

~~R^{18} is iodine or methyl.~~

3. (Previously presented) A process for preparing silylated carboxamides of the formula (I) according to Claim 1, comprising reacting

a) carboxylic acid derivatives of the formula (II)



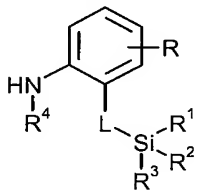
(II)

in which

X^1 is halogen or hydroxyl and

A is as defined in Claim 1

are reacted with amines of the formula (III)



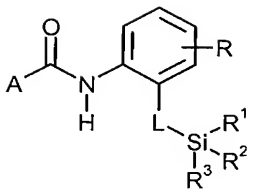
(III)

in which R, L, R^1, R^2, R^3 and R^4 are as defined in Claim 1,

optionally in the presence of a catalyst, optionally in the presence of a condensing agent, optionally in the presence of an acid binder and optionally in the presence of a diluent,

or

b) silylated carboxamides of the formula (I-1)



(I-1)

in which R, L, R^1, R^2, R^3 and A are as defined in Claim 1,

are reacted with halides of the formula (VIII)

$R^{4a}—X^2$ (VIII)

in which

X^2 is chlorine, bromine or iodine,

R^{4a} is C_1-C_8-alkyl, C_1-C_6-alkylsulphinyl, C_1-C_6-alkylsulphonyl, C_1-C_4-alkoxy-C_1-C_4-alkyl, C_3-C_8-cycloalkyl; C_1-C_6-haloalkyl, C_1-C_4-haloalkylthio, C_1-C_4-haloalkylsulphinyl, C_1-C_4-haloalkylsulphonyl, halo-C_1-C_4-alkoxy-C_1-C_4-alkyl, C_3-C_8-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms; formyl, formyl-C_1-C_3-alkyl, (C_1-C_3-alkyl)carbonyl-C_1-C_3-alkyl, (C_1-C_3-alkoxy)carbonyl-C_1-C_3-alkyl; halo-(C_1-C_3-alkyl)carbonyl-C_1-C_3-alkyl, halo-(C_1-C_3-alkoxy)carbonyl-C_1-C_3-alkyl having in each case 1 to 13 fluorine, chlorine and/or bromine atoms;

(C_1-C_8-alkyl)carbonyl, (C_1-C_8-alkoxy)carbonyl, (C_1-C_4-alkoxy-C_1-C_4-alkyl)carbonyl, (C_3-C_8-cycloalkyl)carbonyl; (C_1-C_6-haloalkyl)carbonyl, (C_1-C_6-haloalkoxy)carbonyl, (halo-C_1-C_4-alkoxy-C_1-C_4-alkyl)carbonyl, (C_3-C_8-halocycloalkyl)carbonyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms; or -C(=O)C(=O)R^5, -CONR^{6}R^7 or -CH_2NR^{8}R^9, where R^5, R^6, R^7, R^8 and R^9 are as defined in Claim 1,

in the presence of a base and in the presence of a diluent.

4. (Previously presented) A composition for controlling unwanted microorganisms, comprising at least one silylated carboxamide of the formula (I) according to Claim 1, in addition to extenders and/or surfactants.

5. (Previously presented) A method of controlling unwanted microorganisms comprising applying the composition of claim 4 to said unwanted microorganism or their habitat, or both.

6. (Previously presented) A method for controlling unwanted microorganisms, comprising applying the silylated carboxamides of the formula (I) according to Claim 1 to the microorganisms, their habitats, or both.

7. (Original) A process for preparing compositions for controlling unwanted microorganisms, comprising mixing the silylated carboxamides of the formula (I) according to Claim 1 with extenders, surfactants, or both.